TUM School of Management
Chair of Corporate Sustainability

Bachelor Thesis

"Green Hydrogen Transition: Social Implications in the Global South"

Background

The transition to green hydrogen is considered a key enabler for a sustainable energy future, particularly in addressing climate change and reducing dependence on fossil fuels. While much attention has been given to the technological and economic feasibility of green hydrogen, its social implications remain underexplored. In the Global South, where energy transitions intersect with economic development, social structures, and governance challenges, the implications of green hydrogen adoption on communities, employment, and social equity require deeper investigation.

This bachelor thesis focuses on a systematic literature review of the social implications of green hydrogen transitions, identifying key themes, gaps, and areas for further research. Additionally, the thesis may incorporate a case study to illustrate real-world implications in a specific region or country.

Introductory Readings

- Gevaert, S., Pause, L., Cezne, E., O'Connell, A. L., & Otsuki, K. (2022). Green Hydrogen in the Global South: A literature review. Green Hydrogen in the Global South: Opportunities and Challenges.
- Hanusch, F., & Schad, M. (2021). Hydrogen research: technology first, society second?. GAIA-Ecological Perspectives for Science and Society, 30(2), 82-86.
- Kalt, T., Simon, J., Tunn, J., & Hennig, J. (2023). Between green extractivism and energy justice: competing strategies in South Africa's hydrogen transition in the context of climate crisis. Review of African Political Economy, 50(177-178), 302-321.

Tasks and Goals

- Conduct a systematic literature review on the social implications of green hydrogen transitions in the Global South.
- Identify and categorize the main social challenges and benefits reported in the literature.
- (Optional) Conduct a case study analysis of a selected region or country where green hydrogen projects are being developed.

Requirements

- Strong analytical and critical thinking skills.
- Interest in energy transitions, sustainable development, and social impact.
- Excellent English skills.
- Independent and structured working style.
- Successful completion of the course Corporate Sustainability with a minimum grade of 2.0 is required

Details

- Supervisors: Dr. Alessia Argiolas
- Start: Flexible / As of now.
- Working time: 6 months, with the option of 4 weeks of fully-funded research stay in Namibia or South Africa

Contact

If you are interested in writing your thesis at our Chair or have questions about this topic, please contact Alessia Argiolas (**alessia.argiolas@tum.de**). To apply, send an email including your CV, and the current transcript of records (as one PDF file). We are looking forward to working together with you!